

KDHE PUBLIC WATER SUPPLY 2008 CAPACITY DEVELOPMENT SURVEY

Public water supply systems face many challenges in achieving the goal of providing safe drinking water to their customers. Aging infrastructure, more stringent drinking water standards, and the desire to keep water rates to a minimum are factors that public water supply managers must resolve if they are to be successful. One goal of the Kansas Capacity Development Strategy for Public Water Supply Systems is to identify systems most in need of assistance to improve their technical, managerial, and financial capabilities. This Capacity Survey is one component of the Strategy and will be used to help the State and other public water supply assistance providers develop programs to provide assistance to water utilities, and to provide a “capacity” benchmark which will be used to measure improvements in water system capacity. The Survey should also be useful as a tool to water system managers to measure their strengths and identify their weaknesses.

In Addition, the Kansas Water Plan encourages public water supply systems to achieve capacity. One component of the Kansas Water Plan is for all public water supply systems to develop and maintain the technical, managerial, and financial capability, or the “capacity” to comply with drinking water standards by the year 2010.

The survey questionnaire is organized by the three areas comprising capacity development.

1. **Technical Capacity** requests information concerning adequacy of the water source or water purchase contracts and general information about the physical infrastructure aspects of the utility.
2. **Management Capacity** considers the accountability of the governing body or owner, planning, organization, communication and linkages with mentor organizations such as the League of Kansas Municipalities, Kansas Rural Water Association, American Water Works Association or others.
3. **Financial Capacity** considers the revenue sufficiency, including income, expense, debt service coverage ratios, capital improvement planning, general fiscal management and overall credit worthiness.

If you have questions or need assistance completing this survey please contact:

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Do not write in this space. For KDHE Use only.

KDHE ID _____ Fed ID _____

Name of System _____

City _____ County _____

Name of Person Completing Survey _____ Phone _____

Water System email address _____

TECHNICAL CAPACITY

Technical capacity refers to the physical infrastructure of the water system, including but not limited to the source water adequacy, infrastructure adequacy (including well(s) and/or source water intakes, treatment, storage, and distribution), and the ability of system personnel to implement the requisite technical requirements.

Source

1. What is your system's raw water source and/or who do you purchase water from (check and fill in all that apply)?

☐ Surface:

Lake Name _____

Stream Name _____

☐ Ground:

Nbr. Of Wells Used _____

☐ Purchased From: _____ ☐ Don't know

2. Does your system have an emergency or supplemental water supply?

☐ Yes

☐ No

☐ Don't know

3. If question 2 is yes, please identify emergency source.

☐ Back-up Wells ☐ Connection with another system (name) _____

☐ Back-up Surface Source (stream or lake name) _____

☐ Other (specify) _____

4. If water is purchased from or treated by another system, is there a drought or other "cut-off" clause limiting the amount of water in your system's purchase contract?

☐ Yes

☐ No

☐ Don't know

☐ No purchased water

5. If water is not purchased, does your water system have sufficient water rights issued from the Kansas Department of Agriculture, Division of Water Resources?

☐ Yes

☐ No

☐ Don't know

☐ No water rights, purchase water only

6. How many times in the previous 3 years (2005, 2006 or 2007) did your system impose water use restrictions and what was the total length of time restrictions were imposed?

☐ None ☐ Once ☐ Twice
☐ 3 or more ☐ Don't know

Total Time: ☐ Less than 1 month ☐ 1 to 3 months ☐ 3 to 6 months ☐ More than 6 months

If restrictions were imposed, please indicate the year(s) and if they were mandatory or voluntary

<input type="checkbox"/> <u>2005</u>	<input type="checkbox"/> <u>2006</u>	<input type="checkbox"/> <u>2007</u>
<input type="checkbox"/> Voluntary	<input type="checkbox"/> Voluntary	<input type="checkbox"/> Voluntary
<input type="checkbox"/> Mandatory	<input type="checkbox"/> Mandatory	<input type="checkbox"/> Mandatory

7. If restrictions were imposed in question 6, was this restriction drought related? If no restrictions were imposed proceed to question 9.

☐ Yes ☐ No

8. If restrictions were imposed in question 6, was this restriction due to: (please check all that apply).

<input type="checkbox"/> Treatment Capacity	<input type="checkbox"/> Distribution or Storage Capacity	<input type="checkbox"/> Raw Water Supply Source
<input type="checkbox"/> Water Right Limitations	<input type="checkbox"/> Water Quality	<input type="checkbox"/> Other (Specify) _____
<input type="checkbox"/> Minimum Desirable Streamflow	<input type="checkbox"/> Water Purchase Contract	

9. If yes in question 6, has the cause for restriction been corrected?

☐ Yes ☐ No ☐ Don't know

Please Explain Yes or No Answer: _____

10. Does your system have an approved Source Water Protection Plan or Wellhead Protection Plan?

☐ Yes ☐ No ☐ Don't know ☐ Purchase Treated Water

If yes, has your plan been reviewed and updated within the last 3 years?

☐ Yes ☐ No ☐ Don't know

11. Has your system updated your Source Water Assessment to include any new or reactivated wells that were not in use prior to 2003?

☐ Yes ☐ No ☐ Don't know ☐ Purchase Treated Water

12. Is your system's source capacity higher than your peak day demand by a margin of 50%?
- ☐ Yes ☐ No ☐ Don't know ☐ Purchase Treated Water
13. How many times in the previous 3 years (2005, 2006 or 2007) has your system experienced taste and odor problems?
- ☐ None (If none go to question 16)
- | | | |
|------------------------------------|------------------------------------|------------------------------------|
| <u>2005</u> | <u>2006</u> | <u>2007</u> |
| <input type="checkbox"/> Once | <input type="checkbox"/> Once | <input type="checkbox"/> Once |
| <input type="checkbox"/> Twice | <input type="checkbox"/> Twice | <input type="checkbox"/> Twice |
| <input type="checkbox"/> 3 or More | <input type="checkbox"/> 3 or More | <input type="checkbox"/> 3 or More |
14. What is the average length of time your system's taste and odor problems persist?
- ☐ Less than 1 week ☐ 1 to 2 weeks ☐ 2 to 4 weeks ☐ More than 4 weeks
15. What type of taste and odor problems does your system typically experience? Check all that apply and circle the number to indicate severity of problem (1 = most severe, 2 = moderately severe, 3 = least severe).
- | | | |
|---|--|---|
| <input type="checkbox"/> Musty/Earthy 1 2 3 | <input type="checkbox"/> Fishy 1 2 3 | <input type="checkbox"/> Grassy 1 2 3 |
| <input type="checkbox"/> Rotten Egg 1 2 3 | <input type="checkbox"/> Chlorine 1 2 3 | <input type="checkbox"/> Metallic/Iron 1 2 3 |
| <input type="checkbox"/> Other (Specify)_____ 1 2 3 | | |

Treatment

16. Did your system have any primary drinking water standard violations in 2007?
- ☐ No
- ☐ Yes, list_____
- _____
- _____
- _____
- ☐ Don't know
17. Did your system have any monitoring, reporting or other violations in 2007?
- ☐ No
- ☐ Yes, list_____
- _____
- _____
- _____
- ☐ Don't know

18. What is your system's daily average water production expressed as a percentage of peak production capacity?
- ☐ Less than 50% ☐ 50% - 75% ☐ Greater than 75%
- ☐ Purchase Treated Water ☐ Don't know
19. What is your system's average daily production in Gallons per Day (GPD)?
- _____GPD ☐ Don't Know ☐ Purchase Treated Water
20. Does your system have emergency/standby electrical service (production and/or distribution)?
- ☐ Yes ☐ No ☐ Don't know
21. Can your system maintain full pumping and production operations during a 100 year flood event?
- ☐ Yes ☐ No ☐ Don't know
22. If your system has a surface water treatment plant constructed more than 20 years ago, have treatment processes been upgraded to meet current standards?
- ☐ Yes ☐ No ☐ Don't know
- ☐ Does not apply (ground water treatment, purchase treated water)

Distribution

23. Does your system's operation pressure for any customer service connection fall below 20 psi?
- ☐ Yes ☐ No ☐ Don't know
24. Does your system have at least 24 hours of finished water supply storage at average daily use?
- ☐ Yes ☐ No ☐ Don't know
25. Have your system's water storage facilities been inspected during the past 24 months?
- ☐ Yes ☐ No ☐ Don't know
26. What is your system's unaccounted for water loss as a percentage of total production or purchase?
- ☐ Less than 15% ☐ Between 15% and 29% ☐ More than 29%
- ☐ Don't know
27. Does your system have an active cross-connection control program?
- ☐ Yes ☐ No ☐ Don't know
28. Does your system have accurate maps of your distribution system?
- ☐ Yes ☐ No ☐ Don't know

29. Does your system's distribution system overlap or intertwine with another public water supply distribution system with which it is not interconnected?
- ☐ Yes ☐ No ☐ Don't know

MANAGERIAL CAPACITY

Managerial capacity refers to the management structure of the water system, including but not limited to ownership accountability, staffing and organization, and effective linkages.

30. What is your system's governance structure?
- ☐ Elected board/council ☐ Appointed ☐ Sole ownership
☐ Other (Describe) _____
☐ Don't know
31. Is your system aware of the benefits or does it utilize industry related service organizations such as the Kansas League of Municipalities, the Kansas Rural Water Association or the American Water Works Association?
- ☐ Yes ☐ No ☐ Don't know
32. Do your system's operators have appropriate levels of certification according to the Kansas Department of Health and Environment classifications?
- ☐ Yes ☐ No ☐ Don't know
- If No, does your system have a KDHE approved Operator In Training (OIT)?
- ☐ Yes ☐ No ☐ Don't know
33. Does your system have written personnel policies and job descriptions signed by the employees?
- ☐ Yes ☐ No ☐ No Employees, Contract Labor
☐ No Employees, Volunteer Labor ☐ Don't know
34. Does your system provide benefits to employees (retirement, insurance, etc.)?
- ☐ Yes ☐ No ☐ No Employees, Contract labor
☐ No Employees, Volunteer Labor ☐ Don't know
35. Does your system have formal policies for: payments/collections, main extensions/connections, etc.?
- ☐ Yes ☐ No ☐ Don't know
36. Does the governing body review a monthly summary of revenues and expenses of the utility system?
- ☐ Yes ☐ No ☐ Don't know

37. Does your system have a formal plan for operations and maintenance (line flushing, pumps, meters, storage tanks etc.)?
- ☐ Yes ☐ No ☐ Don't know
38. Does your system have an emergency or contingency plan approved by the Kansas Department of Health and Environment?
- ☐ Yes ☐ No ☐ Don't know
39. Does your emergency plan coordinate with your county emergency plan?
- ☐ Yes ☐ No ☐ Don't Know ☐ Don't Have Approved Plan
40. Does your system have a Water Conservation Plan approved by the Kansas Department of Agriculture, Division of Water Resources or the Kansas Water Office?
- ☐ Yes ☐ No ☐ Don't know
41. Has your system been cited for violations for any deficiencies on the most recent sanitary survey, which have not been corrected?
- ☐ Yes ☐ No ☐ Don't know
42. Does your system have a public information program?
- ☐ Yes ☐ No ☐ Don't know
43. Does your system have a computerized record-keeping system?
- ☐ Yes ☐ No ☐ Don't know
44. Does the governing body approve expenses prior to payment being issued?
- ☐ Yes ☐ No ☐ Don't know
45. Are at least two signatures required to purchase goods and services over \$100.00?
- ☐ Yes ☐ No ☐ Don't know

FINANCIAL CAPACITY

The challenge for most utility systems is to operate like a business. The following questions will assist in evaluating the financial capacity.

46. Does your water system income exceed operating expenses (including debt service)?
- ☐ Yes ☐ No ☐ Don't know

47. Does your system fund a depreciation/capital improvement account?
- ☐ Yes ☐ No ☐ Don't know
48. Does your system have a capital budget or capital improvement plan that projects future capital needs for at least 5 years?
- ☐ Yes ☐ No ☐ Don't know
49. Does your system have financial reserves for emergencies?
- ☐ Yes ☐ No ☐ Don't know
50. Does your water utility support other enterprise funds or the general fund (cities)?
- ☐ Yes ☐ No ☐ Don't know
☐ Does not apply (rwd)
51. Does your system require revenues from other enterprise funds or the general fund for normal operations?
- ☐ Yes ☐ No ☐ Don't know
52. Does your system develop and follow an annual budget that is approved by the governing body?
- ☐ Yes ☐ No ☐ Don't know
53. Does your system have an audited financial statement prepared by a certified public accountant?
- ☐ Yes ☐ No ☐ Don't know
54. Has the auditor submitted a copy of their most recent peer review?
- ☐ Yes ☐ No ☐ Don't know
55. Are the audited financial statements prepared according to generally accepted accounting principals (GAAP)?
- ☐ Yes ☐ No ☐ Don't know
56. Have your system's water rates been reviewed within the last 3 years?
- ☐ Yes ☐ No ☐ Don't know
57. Does your system's current rate structure produce income to cover: (check all that apply)
- ☐ Current Expenses ☐ Replacement Costs ☐ Reserves
☐ Contractual Obligations ☐ No ☐ Don't know

58. Please complete the following table.

Water Rate Schedule for Residential Customers	Total Cost
Monthly Minimum _____ gallons	
5,000 gallons	
10,000 gallons	
15,000 gallons	
20,000 gallons	
30,000 gallons	

59. Please indicate your type of rate.

- ☐ Flat Rate (Not Metered)
 ☐ Block Rate
 ☐ Increasing Block Rate
☐ Decreasing Block Rate
 ☐ Don't Know
 ☐ Other _____

60. Please provide number of service connections.

Year	Residential	Commercial	Industrial	Wholesale	Stock Water/ Pasture	Power Production	Total
2007							
2006							
2005							

61. Did your system's governing body review this survey before returning it to the Kansas Department of Health and Environment?

- ☐ Yes
 ☐ No
 ☐ Don't know

FUTURE PLANNING NEEDS

Planning for future needs is a critical component of developing technical, financial and managerial capacity. The following questions will help identify water systems needing assistance to meet future water supply demands.

62. Is your system considering an additional or different water supply source (raw or treated)? please list.

- ☐ Yes, please list below
 ☐ No, not considering another source

63. If your system is considering additional sources, within what timeframe do you anticipate activation?

- ☐ 5 Years or Less
 ☐ 6 to 10 Years
 ☐ 11 to 20 Years
 ☐ Don't Know